The Climate Change Bill

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[Keywords to Follow]

Introduction and Context

In the Climate Change Bill the Government introduces the world's first legally binding targets for the reduction of greenhouse gas emissions. Is the Bill as significant an environmental measure as it is claimed to be? Are its objectives demonstrably achievable, and/or enforceable? To answer these and other questions about the emerging legislation this article will explore the context and meaning of some of the more important provisions.

It is said that the industrial era is associated with a rise in the concentration of certain gases within the world's atmosphere from 280 parts per million CO_2e[2] to at least 430 ppm CO_2e[3] and a rise in average global temperatures of more than half a degree.[4] There is almost universal consensus[5] that the associated climate change requires urgent and co-ordinated action globally to stem the tide of these so-called greenhouse gases,[6] with the objective of stabilising their concentration at an acceptable level.

Sir Nicholas Stern[7] considered the feasibility of stabilising greenhouse gas concentrations at 450–550ppm CO_2e and suggested ''rich countries'' should achieve emission reductions of 60–80 per cent by 2050 from a 1990 baseline figure. His Review concludes:

> ''Stabilising at or below 550ppm CO2e would require global emissions to peak in the next 10-20 years, and then fall at a rate of at least 1-3% per year . . . By 2050 global emissions would need to be around 25% below current levels. These cuts will have to be made in the context of a world economy in 2050 that may be 3-4 times larger than today—so emissions per unit of GDP would need to be just one quarter of current levels by 2050.

[1] Barrister, 2–3 Grays Inn Square, London. I am not qualified to express views about the science of climate change and have no desire to do so. The views I express in this article about the legislation are my own.

[2] CO_2e gives the carbon dioxide equivalent of the concentrations of other greenhouse gases so that a single measure can be used to give information about the whole basket (or balloon) of gases.

[3] The figure used by Sir Nicholas Stern in his ''Report on the Economics of Climate Change'' published in October 2006 (the Stern Review).

[4] Executive Summary, Stern Review. The Stern Review remains a valuable source of reference particularly for those in the UK, although it is now over a year old. The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) is, however, recognised as the most comprehensive and authoritative assessment of climate change to date. It was released as a single synthesis report on November 17, 2007, although the three working groups' contributions to it were released earlier in the year.

[5] Some commentators maintain that the international climate change agenda is alarmist nonsense. They point out, for example, that four of the warmest years of the last century were in the 1930s.

[6] Greenhouse gases as defined by Kyoto are carbon dioxide CO_2, methane CH_4, nitrous oxide N_2O, hydrofluorocarbons, perfluorocarbons, and sulphur hexafluoride SF_6. The same definition is used in cl.64 of the Climate Change Bill.

[7] Sir Nicholas Stern was (until March 2007) head of the Government Economic Service and a former World Bank economist. His review was announced in July 2005 and published on October 30, 2006. Sir Nicholas Stern is now at the London School of Economics. Not surprisingly, his review has been the subject of several critiques, which are collected by the Stern Review Team within the Office of Climate Change and can be obtained via their website.

> To stabilise at 450ppm CO2e without overshooting, global emissions would need to peak in the next 10 years and then fall at more than 5% per year, reaching 70% below current levels by 2050.''[8]

The Kyoto Protocol to the UNFCCC (Kyoto), adopted in December 1997 and ratified by the United Kingdom in 2002, requires the United Kingdom to achieve a reduction in the emission of greenhouse gases to a level 12.5 per cent lower than base-year[9] levels by 2008–2012. The Government's latest prediction is that, taking into account allowances under the EU emissions trading scheme, UK emissions of the six greenhouse gases ''might be about 23% below Kyoto base-year levels in 2010''.[10] Accordingly, it looks as if the Kyoto requirement will be met. However, in their Climate Change Programme of 2000, the UK Government set themselves a more onerous target for reduction of domestic CO_2 emissions by 2010, namely to reduce them to a level 20 per cent lower than they were in 1990. They have acknowledged that this target is highly unlikely to be met.[11]

Despite progress being made there is, as yet, no international agreement over the amount of or methods for securing emission reduction after 2012. Achieving this was one of the principal objectives of UK representatives at the recent UNFCC Conference in Bali.[12] At the time of writing (December 2007) the press is full of reports about this Conference, at which delegates from 187 countries agreed to launch negotiations towards a new international climate change agreement. The objective is to conclude agreement in 2009 in order to ensure that the new deal can enter into force by 2013. Four major UNFCC meetings are envisaged in 2008 in order to implement ''the Bali roadmap''.

In the United Kingdom, following an extensive programme of pre-legislative scrutiny, the Climate Change Bill was introduced in the House of Lords on November 14, 2007. It received its second reading on November 27, 2007 and during December 2007 and January 2008 is being considered in committee.

My subject can be seen to be in a state of flux at every political level. It is also a focus for those with strong convictions on every side of the scientific and economic debate. Lord Puttnam, in his contribution to the debate on the Bill's second reading in the House of Lords, concluded a powerful speech, saying:

> ''Should we fail to get to grips with this impending crisis, there will be no need to ask for whom the bell tolls. It will be tolling for every man, woman and child on this once quite beautiful planet.''

In this context the objectives of this article are decidedly timid and narrow. I will not get involved in the scientific and political argument and I hope to remain on territory about which I am qualified to speak. In this article I identify the principal provisions of the Climate Change Bill and outline the ways in which it is a controversial, and interesting, piece of legislation. My object is to make

[8] Stern Review Executive Summary.

[9] The base year for CO_2, CH_4 and N_2O is 1990, and for fluorinated compounds is 1995.

[10] See UK Climate Change Programme Annual Report to Parliament July 2007 at para.28.

[11] In July 2006 these were predicted to fall by only 11.7% (or 16.2% when credits purchased through the emissions trading scheme are taken into account). UK Energy and Emissions predictions July 2006 table 4, p.6 available on the DTI website. See too the Climate Change Programme Annual Report to Parliament of July 2007 at para.32.

[12] United Nations Framework Convention on Climate Change Conference held by Indonesia in Bali, December 3–14, 2007.

some of the terms used within the Bill, and the issues which remain contentious as it goes through Parliament, more readily understood by the non-specialist practitioner.

The Climate Change and Sustainable Energy Act 2006 came into force on August 21, 2006, its ''principal purpose'' being to enhance the United Kingdom's contribution to combating climate change.[13] All public authorities performing functions under the Act must have regard to that principal purpose. The 2006 Act imposes a duty on the SoS to lay an annual report before Parliament on the steps taken by government departments to reduce emissions, and on the level of emissions of greenhouse gases within the United Kingdom in the previous calendar year.[14]

The Climate Change Bill

A draft Climate Change Bill was published in March 2007. Three Parliamentary committees reported on its terms including, significantly, a Joint Committee of both Houses of Parliament chaired by Lord Puttnam and established specifically for the purpose.[15] Following the publication of the Government's response to the pre-legislative scrutiny and consultation[16] on October 29, 2007, Lord Rooker introduced the Bill in the Lords on the November 14, 2007.

The Bill would extend throughout the United Kingdom but it recognises the role of the Welsh Assembly, Scottish Parliament, and the Northern Ireland Assembly. To that end, ''national authority'' is defined in cl.67 to mean any of the following: the Secretary of State, the Scottish Ministers, the Welsh Ministers, and the relevant Northern Ireland department (for which see cl.68).

The main provisions of the Bill are:

- the Secretary of State is subject to a duty to ensure that the ''net UK carbon account'' in 2050 is ''at least 60%'' lower than the 1990 baseline (cl.1);
- the Secretary of State is required to set, and then to meet, a series of five yearly carbon budgets, including a 26–32 per cent reduction in the net UK carbon account by 2020 (cll.4–25);
- an independent Committee on Climate Change is to advise the Government on carbon budget setting and on how to reduce emissions over time and across the economy (Pt 2 and Sch.1);
- delegated powers will provide for trading schemes relating to greenhouse gases (Pt 3 and Schs 2–4);
- the Secretary of State must lay before Parliament ''from time to time'' a report on and, subsequently, a programme for adaptation to climate change (Pt 4);
- preliminary steps are taken to introduce a scheme for the making of waste reduction schemes (cll.51–54 and Sch.5);

[13] Climate Change and Sustainable Energy Act 2006 s.1.

[14] The first report was published in July 2007. These reporting requirements are to be replaced by those in the Climate Change Bill in due course (the Bill states January 1, 2009).

[15] These were the Seventh Report of the Select Committee on Environmental Audit published on July 30, 2007 (Environmental Audit Report); the First Report of the Joint Committee on the Draft Climate Change Bill published August 3, 2007 (Joint Committee Report); the Fifth Report of the Select Committee on Environment, Food and Rural Affairs published on July 4, 2007 (EFRA Report). I will refer to each as indicated in brackets.

[16] Some 17,000 organisations and individuals responded to consultation on the draft Bill.

- preliminary steps are taken to enable the Secretary of State to introduce a Renewable Transport Fuel Obligations Scheme by Order (cl.55 and Sch.6).

The most significant provision, in support of which the rest of the Bill is constructed, is arguably the cl.1 duty to ensure that the net carbon account for the year 2050 is at least 60 per cent lower than the 1990 baseline. This has been described as ''The most ambitious target ever set by a Government, certainly in this country''.[17] In this context it is worth noting that the ''optimism bias'' in government forecasting has been strongly criticised by the Environmental Audit Report.[18]

Another major theme of the Bill is the production of reports and analyses, policies and programmes which must be laid before Parliament. These include:

- the Secretary of State's report setting out proposals and policies for meeting the required carbon budget as soon as is reasonably practicable after an order has been made setting the carbon budget for a given period (cl.11);
- the Secretary of State's annual statement to Parliament required by March 31 in the second year following that to which it relates (by March 31, 2010 for 2008) (cl.12);
- the Secretary of State's final statement for the budgetary period required by May 31 in the second year following the end of the period (every fifth year beginning May 31, 2014) (cl.14);
- the Secretary of State's final statement for 2050, required by the May 31, 2052 (cl.15);
- the CCC's report on progress towards meeting the carbon budgets and the cl.1 target for 2050, required by June 30, 2009 and annually thereafter (unless extended as provided for by cl.28). Those reports required in the second year following the end of a budgetary period (i.e. 2014 and every five years thereafter) must also set out the CCC's general views on the response to the budget (cl.28(2)). The deadline for the report may be extended by order subject to the negative resolution procedure;
- the Secretary of State's response to the CCC's annual report which must be laid before Parliament by October 15 in the same year as the CCC's report following consultation with the other national authorities[19] on a draft. The deadline for response may also be extended by negative resolution procedure (cl.29);
- the Secretary of State's report ''containing an assessment of the risks for the UK of the current and predicted impact of climate change'', required ''from time to time''. The first such report is required within three years and subsequent reports should follow at maximum intervals of five years (cl.48);
- the Secretary of State's programme setting out the Government's objectives, policies and proposals relevant to adaptation and in response to the cl.48 report. This is required as soon as is reasonably practicable after the report in cl.48 is laid before Parliament (cl.49). The objectives, policies and proposals must ''be such as to contribute to sustainable development'', a phrase not defined by the Bill. It is, of course, a phrase used frequently by those working in the field of town and country planning, similarly without precise definition.[20]

[17] Malcolm Wicks M.P., then Minister for Science and Innovation, giving evidence to the Joint Committee.

[18] Seventh Report of the Select Committee on Environmental Audit, para.38 and Conclusions para.9.

[19] Defined by cl.67 to include the Scottish Ministers, the Welsh Ministers, and the relevant Northern Ireland Department, itself defined by cl.68.

[20] See Planning and Compulsory Purchase Act 2004 s.39, and para.4 of PPS1.

The 2050 target

Clause 1 provides:

> ''It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is at least 60% lower than the 1990 baseline [which] means the amount of net UK emissions of targeted greenhouse gases for the year 1990.''

It is worth considering the terms used in a little detail.

First, and the most important phrase in the Bill, the ''net UK carbon account'' for any given period is defined by cl.22(1) to be the amount of net UK emissions (emissions from sources in the United Kingdom[21]) for that period reduced or increased to the extent for which provision is to be made in Regulations. Emissions are expressly limited to those ''attributable to human activity'' (cl.69) and may be reduced by ''carbon units'' which are introduced in cl.21 along with the concept of carbon accounting.

Targeted greenhouse gases are carbon dioxide and any other greenhouse gas designated as such by order of the Secretary of State (cl.19). Although CO_2 currently accounts for 84 per cent of UK emissions, the contribution of other greenhouse gases is significant—not least methane.[22] There had been criticism of the draft Bill that governed emissions of CO_2 only.[23] Unless and until a further order is made under cl.19, this is still the case as far as the United Kingdom's carbon account is concerned, because of the Bill's definition of ''targeted greenhouse gases''.

The 1990 baseline is not given a numerical value, ''because the baseline itself is subject to revision as understanding of historic emissions improves''.[24] Clause 24(2) requires the amount of UK emissions for a period to be determined consistently with international carbon reporting practice, itself defined by cl.66. In other words the methodology by which the 1990 baseline is to be determined will be consistent with the methodology used for later periods and in accordance with accepted practice on reporting for the purposes of the UNFCCC—and it may change.

The main issues examined in the parliamentary debates

The first issue, and the subject of the first amendment moved in committee, is whether the Bill should refer to the underlying purpose of the target, namely to stabilise the global mean rise in surface temperature to two degrees over pre-industrial levels. To do so is thought by the Government to raise scientific complexities unnecessarily, and to limit the flexibility of the duties imposed by the Bill, which will need to respond to a developing, even a changing, scientific consensus.

The second issue is the Bill's provisions for amendment of the percentage and of the baseline year, so as to make it either more or less onerous (cll.2 and 3). Although the amendment can only be made after undergoing due process, which includes appropriate consultation with the Committee on Climate Change, the power may be exercised at the discretion of the Secretary of State provided some fairly readily established sets of circumstances apply. For example, when the Secretary of State makes an order designating further greenhouse gases as targeted greenhouse gases, he may also alter

[21] Climate Change Bill cl.24 and see cl.61 for the territorial extent of the UK as defined by the Bill. The emissions caused by international shipping and aviation are excluded save as provided for by cl.25.

[22] For example, 3% of all UK emissions are from methane from landfill: Lord Rooker, November 27, 2007.

[23] Joint Committee Report para.24.

[24] Explanatory Notes to the Bill as introduced November 14, 2007, para 26.

the 2050 target (cl.2(2)). The Joint Committee considering the draft Bill argued that it should only permit an increase in this target.[25]

That being said, it is perhaps the nature of the beast that, since the basis upon which the targets are being established today is a changing phenomenon, namely scientific knowledge, it should be possible to amend the targets as scientific knowledge changes. Those who criticise the power to amend go to the heart of the Bill: is it after all wise to enshrine government targets in legislation, and can it be effective? The former is more a political judgment; the latter is considered further below.

The third issue prominent in debate is whether this is so far-reaching a duty that it should be placed on the Prime Minister specifically.

The fourth is whether the target should be more ambitious than the 60 per cent. The Government have themselves acknowledged that the 60 per cent target is probably not sufficiently onerous and the shadow Secretariat to the Committee on Climate Change (as to which see further below) ''may come forward with a Government amendment in due course''.[26]

The fifth issue is whether the sources of emissions should include those from international shipping and international aviation. It should be recognised that emissions from internal aviation are included. Those from international aviation are said by Lord Rooker to be ''excluded from the targets and budgets, reflecting international practice and the complexity of the issues''. Clause 25 makes provision for Regulations which may in due course include emissions from these sources as emissions from sources in the United Kingdom.

Finally, the question whether a limit should be imposed on the use of overseas credits when calculating the balance in the net UK carbon account should be mentioned. At present there is no such limit. As Lord Puttnam put it at the Bill's second reading:

> ''Let us not cut the ground from under our own feet by setting tough sounding targets, only to immediately start grubbing around for ways in which they can be evaded and avoided.''

Lord Rooker has said in debate:

> ''I have been listening to the voices and think that there is a consensus across the House on this ... I got the message about overseas credits. They can provide a benefit but, as I think my noble friend Lord Puttnam said, we should not grub around using them to avoid the targets. That is crucial and I am sure that this matter will figure highly in our debates in Committee.''[27]

It can be seen that the net UK carbon account is a highly artificial and complex construct and that the duty, although simply expressed, is not so simply understood. The legislation needs to strike a difficult balance between the need on the one hand to enable the Government to make such alterations to the targets as are appropriate in the light of any change in the advice received; and the need on the other hand to inspire confidence that the targets are indeed appropriate and achievable, and reasonably firmly fixed.

[25] Joint Committee Report para.44.
[26] Lord Rooker at the Second Reading of the Bill in the Lords: *Hansard* HL, col.1209 (November 27, 2007).
[27] Lord Rooker at the Second Reading of the Bill in the Lords.

Carbon budgeting

Clause 4(1) contains a duty in two parts. The first part provides:

> "It is the duty of the Secretary of State—
>
> (a) to set for each succeeding period of five years beginning with the period 2008-2012 ('budgetary periods') an amount for the net UK carbon account (the 'Carbon budget')."

The carbon budgets for three five-year periods (to 2022) must be set before February 28, 2009, and for subsequent five-year periods some 12 years ahead (that for 2023–2027 by June 30, 2011). These measures are of critical importance not only because the rate at which emissions are reduced is at least as important as the ultimate target, but because businesses need to be able to plan ahead, and in order to stimulate appropriate investment.

They are set by order and followed up "as soon as is reasonably practicable" with a report setting out the proposals and policies for meeting them (cl.11).

The amount set for the net UK carbon account in the period 2018–2022 must be such that the annual equivalent for that period is at least 26 per cent, but not more than 32 per cent, lower than the 1990 baseline (cl.5), although these percentages may be amended by order subject to affirmative resolution procedure (cl.6). Generally the budget must be set with a view to meeting the cl.1 target (cl.8). However, the matters to be taken into account in deciding the level of the carbon budget are expressly not restricted (cl.10(3)) and include the likely impact of the decision on the economy and on social circumstances (in particular the impact of the decision on fuel poverty)[28] (cl.10). This raises the prospect that more general socio-political imperatives may be used to justify an alteration in the budget that would not be justified by development in the science on climate change.

The second cl.4(1) duty reads as follows:

> "It is the duty of the Secretary of State—
>
> (b) to ensure that the net UK carbon account for a budgetary period does not exceed the carbon budget."

Given the political risk involved, it is perhaps not surprising that the Government seeks a range of powers to call on if it proves as difficult as some commentators expect to stay within budget. So, for example:

- The Secretary of State may alter the budget for a given period if it appears to him that there have been significant changes since the budget was set affecting the basis upon which "the decision" was made (cl.16). This power of amendment is subject to affirmative resolution procedure but it may be exercised after the budget period has begun if such changes also took place after the period began. There is no express restriction on the extent of changes permitted, and no express requirement that they relate to or give effect to the "significant changes" required to justify them.
- The Secretary of State may "carry back" from later periods (subject to a maximum of 1 per cent of the later period's carbon budget) (cl.13(2)). In doing so the carbon budget for the

[28] Fuel poverty is a phrase introduced by the Sustainable Energy Act 2003: a member of a household living on a lower income which cannot be kept warm at reasonable cost is living in fuel poverty (s.1(6) of that Act).

later period is reduced and the earlier period increased. This power may even be exercised during the currency of that later period (if the two are consecutive)[29] and would enable the Government to claim retrospectively that the carbon budget is met, where it would otherwise have been missed (cl.14(6)).

- The Secretary of State may ''carry forward'' or bank the whole or any part of any surpluses in the budget so increasing the budget in the later period (cl.13(3)). Although these may only be carried forward into the next budget there is no restriction on the number of times this may be done. If net emissions are ''x'' below the carbon budget, for whatever reason, the Secretary of State may increase the next budget by up to ''x''.

Arguably the power to amend a budget more than a year after the end of a budgetary period ''makes a nonsense of the entire concept''.[30] In its report on the draft Bill the Joint Committee recommended:

- removal of the upper limit on the 2018–2022 target[31];
- the Secretary of State to be subject to a duty to impose a cap on the use of international credits and to publish the rationale for the cap[32];
- the Government should set out indicative figures for reductions in each sector and publish the underlying analysis[33];
- the removal of the power to amend the budget retrospectively.[34]

None of these recommendations has been followed.

The political aspect to the process is emphasised by the reporting obligations in the Bill. The Secretary of State must lay before Parliament an annual statement of UK emissions of greenhouse gases and the other information specified in cl.12. The statement will need to provide information on two distinct sets of data: first, the amount of UK emissions of all greenhouse gases (and the methods used to measure or calculate them); secondly, the net UK carbon account for the relevant budgetary period (as at the latest date before the statement as is reasonably practicable). He has until March 31 in the second year after that to which it relates to publish the statement (so he has until March 31, 2010 to provide the 2008 statement, the first required by the Bill). The duty is more onerous and specific than the current reporting obligation[35] which will be repealed (cl.58). The date set for repeal will enable 2007 to be covered by the 2006 Act.

The provisions in cl.14 require the Secretary of State to lay before Parliament a statement for each budgetary period (by May 31 in the second year following the end of the period) which brings together relevant information provided in the annual statements. It must, among other things, state whether the carbon budget for the period has been met. If it has not been met, ''the statement must explain why it has not been met'' (cl.14(8)). This is the only sanction provided by the Bill for non-compliance with the cl.4 duty.

[29] Changes may be made until May 31 in the second year after the end of the earlier of the two budgetary periods affected.

[30] Summary of the EFRA Report.

[31] Joint Committee Report para.53.

[32] Joint Committee Report paras 93 and 94.

[33] Joint Committee Report para 76.

[34] Joint Committee Report para.77.

[35] Climate Change and Sustainable Energy Act 2006 s.2, which requires a report on (a) steps taken by government departments during the previous calendar year to reduce emissions of greenhouse gases, and (b) the level of emissions of greenhouse gases in the UK during the previous calendar year, including any increase or decrease in that level recorded during that year.

Enforcement

The Bill imposes a duty on the Secretary of State ''to ensure'' that the net carbon account is ''at least 60% lower than the 1990 baseline'' (cl.1). The Government claims that ''this legal duty would mean that a Government which fails to meet its targets or stay within budget would be open to judicial review''.[36]

Notwithstanding the potential for judicial review, both the cl.1 duty and the cl.4 duty to ensure compliance with the five yearly budgets would, in my opinion, be ultimately unenforceable in the courts.[37]

The question of enforceability arises in part in deference to the principle that no Parliament can bind its successors, and there will be several successors before the cl.1 duty can be shown to have been breached. Furthermore the five-year budgetary periods are thought by some to raise unnecessary party political issues given the relationship the end of a period may have to the time chosen to call an election. Perhaps these are inevitable problems and not unduly difficult to deal with. The more significant concern about enforceability relates to the sanction of the court and its role in judicial review.

The claim for judicial review must be brought promptly: might this justify or require a claim to be made ahead of the statement for the budgetary period? If so, given the complexity of that statement and its role as asserted by cl.14(7), what evidence would suffice? If the claim must await the publication of that statement, what purpose would it serve?

Although it may be possible to secure a declaration in an appropriate case, it would be difficult to frame any more useful remedy under the Bill as presently drafted. Duties (imposed on signatory states) similar to those found in cll.1 and 4 are found in the Kyoto Protocol. A compliance mechanism independent of the courts and similar to that under the Kyoto Protocol was the ''strong preference'' of the Joint Committee and remains an objective of some who seek amendments to the Bill.

The Government's response to concerns about the enforceability of cl.1 was expressed by Lord Rooker during the Bill's second reading:[38]

> ''It is worth putting on record—and this is the only substantive note that I shall use—what happens if the target is missed. There is an issue about there being no sanction. Ex-Ministers in the House will see a chord struck on this. This will be useful for Committee stage. Putting a duty such as this into law is important in itself. *It is not just about the punishment in the event of failure; it is about trying to change institutional behaviour through change in the law.* The rule of law is extremely important in our constitution and this is reflected in the *Civil Service Code* and the *Ministerial Code*, which emphasise the importance of complying with the law. By putting these duties into law, we are giving them a constitutional significance which will permeate down to every level of decision making. There is no other way of achieving an equivalent effect without using the law. The duty should be looked at in this broader constitutional sense, rather than just in terms of what happens in court. Nevertheless the statutory basis of the targets and

[36] para.5.44.

[37] See generally the Joint Committee Report, paras 104–120 with extracts from the opinions of witnesses, among them Professor Forsyth of Cambridge University: ''this is a duty that is unenforceable in the courts''; M.R. Woods of Stephenson Harwood and council member of the UKELA in a statement to the EFRA committee: ''Judicial review is . . . not an appeal tribunal that is supposed to have an over-arching approach to bigger picture politics, political decisions and targets such as this . . . the judicial review challenge would not actually change anything.''

[38] *Hansard* HL (November 27, 2007).

> the budgets in the Bill mean that any failure to meet the target or budget carries a risk to government of judicial review. In such a case, the remedy would be at the discretion of the court. In most circumstances where a Government have failed to comply with a duty, courts do no more than issue a declaration. However we cannot completely rule out the possibility of the court making a more stringent order, such as ordering them to purchase credits, and no Government will take that risk lightly.'' (emphasis added)

The sceptical reader may think the Government is saying that it doesn't matter whether or not the cl.1 duty is unenforceable because the Government's objectives are merely to effect the necessary institutional culture change which will follow when ministers and civil servants gear their decisions and advice towards the achievement of the targets concerned. Lord Rooker appears to offer us a false choice in the passage emphasised above: those concerned about enforceability are not looking for ''punishment'' for failure but asking simply whether the requirement to achieve a given reduction of greenhouse gases can be enforced. If not, the credibility of the targets may be adversely affected. Although this is, inevitably, a Bill to set objectives in support of which much other legislation will be required, it may be thought undesirable to place an ultimately unenforceable duty at the heart of the Bill.

The Committee on Climate Change

The Office of Climate Change (OCC) was established in October 2006 and has been responsible for, among other things, drafting the Climate Change Bill. Its website was launched in November 2007[39] and its stated role ''is to support Ministers to develop future UK strategy and policy on domestic and international climate change''. Its stated mission ''is to improve climate change policy and delivery by providing independent support and challenge across the UK government''. Nevertheless it is a government resource and not an independent statutory body.

The website identifies those projects the OCC has completed, and those which are ongoing—with a link to the relevant material. The *Committee* on Climate Change (CCC) is listed as one of the OCC's ongoing projects. It is to consist of five to eight members supported by a Secretariat to carry out in-depth research. A shadow (non-statutory) committee is being set up at the time of writing which will acquire formal status once the Bill passes into law.

The shadow Secretariat, within the OCC, has already issued a call for evidence with a deadline during January 2008 so as to enable the Committee (when appointed and following the passing of the Act) to provide the cl.27 advice on carbon budgets for the first three budgetary periods from 2008 up to 2022, which it is required to do by September 1, 2008.

The CCC will be a non-departmental public body with a duty to advise the Government on the level of carbon budgets, methods for achieving reductions, and the contribution towards meeting the budgets to be made by sectors of the economy. It must produce annual progress reports, and set out final emissions figures for the period just passed. It is critical to achieving credibility and transparency in the carbon budgeting process.

According to Sir David King, chief scientific adviser, the CCC ''is advisory but I am rather expecting that its advice will be adhered to most of the time''.[40] Inevitably the force of its recommendations

[39] *www.occ.gov.uk.*

[40] Evidence to the Joint Committee Report on the draft Bill.

will depend on its credibility and the transparency of the process. For obvious reasons it must be adequately resourced so as to avoid reliance by the Committee on information provided to it by Government.[41]

Nevertheless, guidance will flow between the Government/devolved administrations and the CCC in both directions: under cl.33, guidance may be given to the Committee on the matters it is to take into account when exercising its functions to which the Committee ''must have regard''. More interesting still, mandatory directions under cl.34 may be given to the Committee as to the exercise of its functions, albeit there is no power to direct the Committee as to the content of any advice or report (cl.34(4)).

Trading schemes

The Bill proposes extensive delegated powers to enable the Government, and the devolved administrations, to extend existing, and establish new, forms of trading schemes to reduce emissions. These are set out in some detail within Sch.2, in particular. Schedule 3 sets out procedural requirements for making Regulations and Sch.4 confers on environmental authorities[42] powers to obtain information from electricity suppliers and distributors, and potential participants, in order to establish a trading scheme. These powers would cease to have effect on January 1, 2011.

A trading scheme is defined by cl.36(2) as:

> ''a scheme that operates by—
>
> a) limiting or encouraging the limitation of activities that consist of the emission of greenhouse gas or that cause or contribute, directly or indirectly, to such emissions, or
> b) encouraging activities that consist of, or that cause or contribute, directly or indirectly, to reductions in greenhouse gas emissions or the removal or greenhouse gas from the atmosphere.''

The Bill does not itself identify any specific trading schemes. One proposal we have notice of is the Carbon Reduction Commitment which would impose a cap on medium and large energy-intensive businesses and public bodies.[43] The other is the personal carbon allowance. The Joint Committee supported the idea but recommended specifically that the introduction of a personal carbon allowance should require primary legislation.[44]

Adaptation

Sir Nicholas Stern said that adaptation to climate change is ''crucial to reducing vulnerability to climate change and the only way to cope with the impacts that are inevitable over the next few decades''.[45] The Joint Committee was critical of the draft Bill's failure to make greater provision for adaptation and it is given greater prominence in the Bill, albeit the statutory requirement remains no more than a reporting one (see above).

[41] A point made by each of the three Committees which have reported on the draft Bill.
[42] Defined by para.1 of Sch.4 as the Secretary of State, the Scottish Ministers, the relevant Northern Ireland Department, the Welsh Ministers, the Environment Agency, and the Scottish Environment Protection Agency.
[43] See Energy White Paper 2007.
[44] Joint Committee Report para.182
[45] Joint Committee Report para.128.

Waste reduction schemes

Waste reduction schemes are schemes to ''incentivise the occupiers of domestic premises to produce less waste and to recycle more of the waste they produce''.[46] The power to make a waste reduction scheme is conferred on waste collection authorities by a new s.60A of the Environmental Protection Act 1990, and a new Sch.2AA to that Act sets out the purpose of waste reduction schemes (para.1) along with some of the provisions they may or must include.

Among the mandatory provisions, a scheme must provide a financial incentive in order to achieve the purpose of the scheme, whether by rebates of council tax, by other payments, or by charges, and must be revenue neutral to the authority (paras 3 and 7 respectively).

The provisions may only be brought into force in accordance with the arrangements for pilot schemes, their review, and roll-out or repeal within cll.52–54 of the Bill.

Renewable transport fuel obligations

By virtue of Pt 2, cl.5 of the Energy Act 2004 the Secretary of State may by Order impose renewable transport fuel obligations on specified transport fuel suppliers. One such order has been made, namely the Renewable Transport Fuel Obligations Order 2007 which came into force on October 26, 2007 and which establishes the Office of the Renewable Fuels Agency (RFA) to administer a scheme for successive annual periods beginning on April 15, 2008.

Clause 55 and Sch.6 of the Climate Change Bill would amend the provisions of the Energy Act and enable changes to be made to the 2007 Order if appropriate. Although the Order would remain effective in its appointment of the RFA as administrator, new and amended provisions add to the detail concerning the appointment and powers of an administrator. Perhaps most significantly the Bill would impose a new duty on the administrator ''to promote the supply of renewable transport fuel whose production, supply or use—(a) causes or contributes to the reduction of carbon emissions, and (b) contributes to sustainable development or the protection or enhancement of the environment generally'' (new s.125A).

Conclusions

The Climate Change Bill introduces the complex process of carbon accounting by which the ''net UK carbon account'' is established, and it sets very ambitious target figures for the level of that carbon account in the medium term (2018–2022) and long term (2050). Ambitious though they are, they represent the lower figure in the Stern Review range (60 per cent), concern only emissions of CO_2, and ignore the contribution of emissions by UK based international shipping and aviation. Although there is potential for alteration by amendment it is perhaps not surprising that some say the targets are not ambitious enough. One of the first tasks of the Committee on Climate Change established by the Bill will be to advise whether they need to be revised. The CCC is being set up in shadow form while the Bill progresses through Parliament since the first of its reports is due by September 1, 2008.

The statutory duty ''to ensure that'' the various targets are met is an imprecise and ultimately unenforceable duty. The Secretary of State will have regard to a wide range of considerations when setting the carbon budget, not least social and economic ones. We may accept that the Government

[46] Explanatory notes to the Bill, para.203.

will do all they can to achieve emission reductions consistent with maintaining acceptable social and economic conditions, but no analysis has been presented to demonstrate that the measures introduced in the Bill or elsewhere make the targets achievable. When the powers of amendment are taken into account it can be seen that the "legally binding" targets of which the Government is so proud are little more than their current political objectives.

That is not to say the Bill is not a highly significant piece of legislation. Environmental lawyers will want to familiarise themselves with the UK carbon account and the precise meaning of the various terms used in relation to it. The Bill's targets will be used to justify additional measures designed to benefit the net UK carbon account (some of them introduced in skeleton form in the Bill itself[47]). The Government's Annual Report to Parliament of July 2007 provides at Annex B a summary of progress in relation to 35 "policies and measures" (including the Climate Change Bill itself) as at the time of its preparation. It illustrates just how much government activity is now devoted to the task of tackling climate change. There is no sign of abatement.

[47] Emissions trading schemes, waste reduction schemes and the amendment of existing powers to make renewable transport fuel orders imposing obligations on designated suppliers.